

SMX 3152.1 (2002-110R1)
PATENT

REMARKS

Applicants respectfully request reconsideration and allowance of all pending claims.

I. Status of Pending Claims

In this Amendment B, claims 19-23, 28, 29, 31, 39 and 40 have been amended, claim 38 has been canceled, and claims 55 and 56 have been added. Accordingly, claims 1-15, 19-37 and 39-56 are now pending.

Claim 19 has been amended to amplify certain embodiments of the present invention. For example, amended claim 19 calls for forming a dispersion using a solution comprising a first and a second dissolved metal, both of which are precipitated on the particulate support upon removal of heat from the dispersion. Support for the amendments to claim 19 may be found, for example, in now canceled claim 38.

Claims 20-23, 28, 29, 31, 39 and 40 have been amended to ensure the claim language therein is consistent with claim 19, as amended, and/or to ensure proper claim dependency in view of the present amendment to claim 19.

Finally, claims 55 and 56 have been added. Claim 55 calls for forming a dispersion using a particulate support comprising a pre-deposited material thereon, while claim 56 depends from claim 55 and calls for forming an alloy of the metal of the pre-deposited material and the precipitated metal. Support for these claims may be found, for example, in claims 19 and 31 as originally presented, as well as paragraphs [0022] and [0028] of the present application.

SMX 3152.1 (2002-110R1)
PATENT

II. §103 Rejection

Reconsideration is respectfully requested of the rejection of claims 1-3, 7, 8, 14, 15, 19-24, 26-30, 47, 48 and 50-54 under 35 U.S.C. §103 as being obvious in view of French Patent No. 2,315,318 (hereinafter "the French Patent").

A. Claims 1-3, 7, 8, 14 and 15

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. And third, the prior art reference must teach or suggest all of the claim elements. MPEP §2142. In the instant case, Applicants respectfully submit, for the reasons set forth in detail below, that the claimed invention is not obvious in view of the cited French Patent because it **fails to disclose or suggest all of the elements of claim 1.**

Claim 1 of the present application is directed to a method for forming a supported metal-containing powder. In relevant part, the claimed method comprises the step of separating a particulate support from a frozen solution in which it is dispersed by freeze drying, wherein **during this separation, or freeze-drying, step at least a portion of the frozen solution is allowed to melt.** As noted in the present application, in for example paragraph [0041], Applicants have discovered that a free-flowing, non-agglomerated powder may be prepared, even if **a portion of the solvent in the frozen solution is allowed to melt during freeze drying.**

In contrast to the method of claim 1, the French Patent makes **no reference** to allowing a portion of the frozen solvent to melt **during** freeze drying. In fact, the cited French patent suggests that the frozen paste is **not** allowed to melt during freeze drying, and thus arguably teaches away from the claimed method. Specifically, the French Patent states:

SMX 3152.1 (2002-110R1)
PATENT

The viscous paste is then **instantly frozen** by immersion into liquid nitrogen and **dried by freeze-drying**.

The fine powder resulting from the latter operation is **immediately reduced . . .** (See page 2, at lines 27-29. Emphasis added.)

Furthermore, Applicants respectfully submit the Office has already effectively acknowledged that the French Patent **does not** suggest melting **during** freeze-drying, given that the Office has only asserted that it would have been obvious to one of ordinary skill in the art that **after** the freeze-drying step, as opposed to **during** freeze drying, the frozen powder may exhibit some degree of melting. Specifically, the Office states on page 5 of the present action:

it would have been obvious to one having ordinary skill in the art at the time the invention was made to expect that, **during** the prior art's steps [sic] of **reducing** at a temperature of 150°C-600°C, or even prior to the reduction step (i.e., **after** the **freeze-drying** step), the powder would exhibit some degree of melting due to the reduction temperature, or even due to the change in temperature **after freeze-drying** is completed. (Emphasis added.)

In view of the foregoing, Applicants respectfully submit the French Patent fails to disclose or suggest all of the elements of claim 1. Accordingly, reconsideration of this rejection is respectfully requested.

In as much as claims 2, 3, 7, 8, 14 and 15 depend from claim 1, these claims are submitted as patentable over the French Patent for the same reasons as those set forth with respect to claim 1.

SMX 3152.1 (2002-110R1)
PATENT

B. Claims 19-24, 26-30, 47 and 48

As noted above, claim 19, from which claims 20-24, 26-30, 47 and 48 directly or indirectly depend, has been amended to include the limitations of dependent claim 38 (now canceled). The Office did not indicate that claim 38 stood rejected as obvious in view of the French Patent; Applicants therefore interpret this as an indication that claim 38 was found patentable over it.

Accordingly, Applicants respectfully submit the present amendment to claim 19 renders the rejection of this claim, as well as claims 20-24, 26-30, 47 and 48 depending therefrom, moot. Withdrawal of the rejection of these claims as obvious in view of the French Patent is therefore respectfully requested.

C. Claim 50-54

Claim 50, from which claims 51-54 depend, is directed to a method for forming a supported metal-containing powder. The method comprises, in relevant part, forming a dispersion of a particulate support in a solution comprising a solvent and a dissolved metal, wherein this **dispersion comprises about 1 to about 30 weight percent of the particulate support**. As noted in the present application in, for example, paragraphs [0030] to [0032], it is desirable to prepare a dispersion wherein the support is uniformly distributed in the solution, by means of the mixing technique and/or the concentration of support in the solution, in order to obtain uniform deposits on the supports.

In contrast to the method of claim 50, the French Patent **fails to disclose or suggest** a dispersion wherein the concentration of support particles therein is about 1 to about 30 weight percent. In fact, the French Patent makes **no reference** to the concentration of the support particles present in the "paste" prepared therein.

**SMX 3152.1 (2002-110R1)
PATENT**

In view of the foregoing, Applicants respectfully submit the French Patent fails to disclose or suggest all of the elements of claim 50. Accordingly, reconsideration of this rejection is respectfully requested.

In as much as claims 51-54 depend from claim 1, these claims are submitted as patentable over the French Patent for the same reasons as those set forth with respect to claim 50.

D. New claims 55 and 56

New claims 55 and 56 depend from claim 50. Applicants therefore respectfully submit these claims are patentable over the French Patent for the same reasons as those set forth with respect to claim 50. Additionally, these claims are submitted as patentable over the French Patent for the following reasons:

- (i) Claims 55 and 56 are directed to a method which is similar to that of claim 31, which the Office has already effectively indicated is patentable over the French Patent.
- (ii) Claim 55 requires that **the particulate support** present in the dispersion **comprises a pre-deposited material** selected from the group consisting of a pre-deposited metal compound, a pre-deposited metal in its metallic oxidation state, and combinations thereof. As a result, once heat is removed from the dispersion and separation occurs, the resulting powder comprises the particulate support having the pre-deposited metal, as well as a precipitated metal, thereon. In contrast to the method of claim 55, the French Patent makes **no reference** to the use of a particulate support to form a dispersion which has a pre-deposited material thereon. Rather, this patent only references the use of finely divided carbon (see page 2, lines 3 and 12), which the Office has already acknowledged (see the present action at page 5, line 5). As a result, the French patent also

SMX 3152.1 (2002-110R1)
PATENT

makes **no reference** to a powder which comprises a support having a pre-deposited metal, as well as a precipitated metal, thereon.

- (iii) Claim 56, which depends from claim 55, is additionally submitted as patentable over the French Patent because it requires that the method comprise **forming an alloy** on the particulate support which comprises metals derived from the pre-deposited material and the precipitated metal. The French Patent makes **no reference** to such a method.

In view of the foregoing, Applicants respectfully submit the French Patent fails to disclose or suggest all of the elements of either claim 55 or 56. These claims are therefore respectfully submitted as patentable over this patent.

**III. Provisional Nonstatutory Double Patenting
Rejection of Claims 1-15, 19-37 and 39-54**

Reconsideration of the provisional double patenting rejection of claims 1-15, 19-37 and 39-54 in view of claims 1-7, 10-16, 18-23, 31-34, 36, 38, 39, 42 and 44-46 of co-pending application Serial No. 10/777,482 is respectfully requested.

In response to the present rejection, Applicants respectfully call the Office's attention to MPEP §804, I., B., which states:

The "provisional" double patenting rejection should continue to be made by the examiner in each application as long as there are conflicting claims in more than one application unless that "provisional" double patent rejection is the only rejection remaining in one of the applications. **If the "provisional" double patenting rejection is the only rejection remaining in one of the applications, the examiner should then withdraw that rejection and permit the application to issue**

**SMX 3152.1 (2002-110R1)
PATENT**

as a patent, thereby converting the "provisional" double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent. (Emphasis added)

A. Claims 1-15, 19-37 and 39-54

For the reasons set forth above, Applicants respectfully submit the provisional double patenting rejection is the only rejection remaining with respect to all pending claims of the present application. As a result, Applicants further submit that, consistent with the above-noted section of the MPEP, the double patenting rejection should be withdrawn and the present application should be permitted to issue.

Accordingly, reconsideration of this rejection is respectfully requested.

B. Claims 4-6 and 9-13

Applicants additionally submit that, in as much as claims 4-6 and 9-13 do not stand rejected as obvious in view of the above-noted French Patent, **the Office should have previously identified these claims as allowable**, if rewritten in independent form to include all the limitations of the claims from which they depend. This would be consistent with the above-noted section of the MPEP, because the provisional double patenting rejection is the **only** rejection remaining with respect to these claims.

Accordingly, for this reason reconsideration of the rejection of these claims is particularly requested.

C. Claims 25, 31-37, 39-46 and 49

Applicants additionally submit that, in as much as claims 25, 31-37, 39-46 and 49 do not stand rejected as obvious in view of the above-noted French Patent, **the**

**SMX 3152.1 (2002-110R1)
PATENT**

Office should have previously identified these claims as allowable, if rewritten in independent form to include all the limitations of the claims from which they depend. This would be consistent with the above-noted section of the MPEP, because the provisional double patenting rejection is the only rejection remaining with respect to these claims.

Accordingly, for this reason reconsideration of the rejection of these claims is particularly requested.

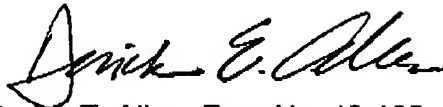
SMX 3152.1 (2002-110R1)
PATENT

CONCLUSION

In view of the foregoing, favorable reconsideration and allowance of all pending claims is respectfully requested.

The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to Deposit Account No. 19-1345.

Respectfully submitted,



Derick E. Allen, Reg. No. 43,468
SENNIGER POWERS
One Metropolitan Square, 16th Floor
St. Louis, Missouri 63102
(314) 231-5400

DEA/skd

Via Facsimile
Mail Stop AF